Summary

A cascaded Raman laser (10) has a pump radiation source (12) emitting at a pump wavelength λ_p, an input section (14) and an output section (16) made of an optical medium. Each section (14, 16) comprises wavelength selectors (141, 142, ..., 145 and 161, 162, ..., 165) for wavelengths λ_1, λ_2, ..., λ_{n-k}, where $n \geq 3$, $\lambda_p < \lambda_1 < \lambda_2 < \ldots < \lambda_{n-1} < \lambda_n$ and λ_{n-k+1}, λ_{n-k+2}, ..., λ_n being $k \geq 1$ emitting wavelengths of the laser (10). The laser further comprises an intracavity section (18) that is made of a non-linear optical medium, has a zero-dispersion wavelength λ_0 and is disposed between the input (14) and the output (16) section. The wavelengths λ_1, λ_2, ..., λ_{n-k} of the wavelength selectors (141, 142, ..., 145 and 161, 162, ..., 165) and the zero-dispersion wavelength λ_0 of the intracavity section (18) are chosen such that energy is transferred between different wavelengths by multi-wave mixing.